

REMARKS

The Invention

This invention relates to prefabricated houses and, more specifically, to a modular, expandable prefabricated house. The disclosed invention provides a prefabricated house having two or more modules, each module having one or more foldable walls. The foldable walls have one or more multi-frame openings that may be converted to doors, windows or other openings. Thus, the individual modules are structured to be joined at the multi-frame openings in more than one configuration. For example, if each module was rectangular and included a multi-frame opening at the middle point of each wall, the modules could be joined along adjacent longitudinal walls thereby forming, generally, a square shaped layout, or, the modules could be joined with a longitudinal wall coupled to a lateral wall, thereby forming, generally, a T-shaped layout. The multi-frame openings are special constructs.

That is, multi-frame openings are built into the module frame during construction, but may be disposed under a covering over the frame, such as dry wall. The multi-frame openings 20 on separate core modules are disposed in predetermined locations so that multiple core modules may be joined together when the modules are aligned in various predetermined configurations. Thus, when core modules are joined together, any pair of multi-frame openings may have the covering removed so that a passageway is formed. Other multi-frame openings may be converted into windows or other such openings. Construction of the multi-frame opening may be traditional or steel framed or a combination or hybrid, including wood, steel, plastics, adhesives, screws, nails, chalkboard, vinyl, glass, rubber and/or not limited to other synthetics. The multi-frame openings may be disposed between any two spaced apart studs within the frame, and incorporates the studs into the multi-frame opening. The multi-frame opening also includes a plurality of cross members. Two of the cross members, at the top and bottom, may be integral with the module frame. The top and bottom cross-members along with the medial cross-members are removably coupled to the studs and may be removed as required to construct the appropriate sized openings.

Status of the Claims

Claims 1, 2 and 4-19 are pending in the application.

Claims 1-2, 4, and 17-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Dattner*, U.S. Patent No. 3,720,022.

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* '022 in view of *Derman* (U.S. Patent No. 2,070,924).

Claims 7-11, 13, 16 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* '022 in view of *Prigmore et al*, U.S. Patent No. 4,779,514.

Claims 14-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* '022 in view *Prigmore et al.* '514 as applied to claims 13 and 12 and further in view of *Derman* U.S. Patent No. 2,070,924.

Claim 12 has been canceled.

Claims 1-2, 4, and 17-18; Rejected under 35 U.S.C. § 102(e)

Claims 1-2, 4, and 17-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Dattner*, U.S. Patent No. 3,720,022.

Initially, it is noted that this application is directed to the construction of homes and, more specifically, prefabricated homes. Thus, the terminology and the meaning of the words used in the claims must encompass the meaning that a builder of homes would apply to those words. For example, Robert Delorenzo, a party with no interest in this application and whose Affidavit has been previously submitted, is a home builder with over 20 years of experience. As set forth in the Affidavit of Robert Delorenzo (copy submitted with the Response filed October 5, 2006 and attached as Exhibit A), a frame having "studs" includes a top plate, a bottom plate, and a plurality of studs (vertical members). Such "studs" are typically placed either 16 inches or 24 inches apart. Conversely, a "post" is a load-bearing vertical member, typically located at the corner of a wall. Unlike "studs," which are located relatively close to each other, additional "posts" are, typically, spaced more than two feet apart from a corner post. These definitions comport with other sources that are directed to those skilled in the art of home

construction. See, Guertin and Arnold, *Fine Homebuilding*, “Anatomy of a Stud-Framed Wall,” at <http://www.taunton.com/finehomebuilding/pages/h00023.asp>., (copy attached as Exhibit B), *Ask This Old House*, Stud Spacing, <http://www.thisoldhouse.com> (copy attached as Exhibit C), Ching, Building Construction Illustrated (3rd Ed.), 2001, page 5.03, (copy attached as Exhibit D), and, The BOCA National Building Code, 1999, (stating that, “Studs in nonloadbearing walls and partitions shall not be spaced more than 48 inches....”) (copy attached as Exhibit E).

It is further noted that, while the claims must be given their broadest reasonable interpretation, such an interpretation must be reasonable, "in light of the specification as it would be interpreted by *one of ordinary skill in the art.*" *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827 (Fed. Cir. 2004) (emphasis added). Further, as noted at MPEP §2111, “the rules of the PTO require that application claims must ‘conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description’” (quoting the Federal Circuit’s *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) and 37 CFR 1.75(d)(1)).

Reference to “one skilled in the art” when determining the broadest reasonable interpretation is notable as general usage dictionaries do not always provide the definition used by skilled persons. That is, as set forth in *Irdet Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300, 72 USPQ2d 1678 (Fed. Cir. 2004), “where evidence such as expert testimony or technical dictionaries demonstrates that artisans would attach a special meaning to a claim term ... ‘general-usage dictionaries are rendered irrelevant with respect to that term’” (citing *Vanderlande Indus. Netherland BV v. Int'l Trade Comm'n*, 366 F.3d 1311 (Fed. Cir 2004)). This holding comports with the holding in *Dow Chemical Co. v. Sumitomo Chemical Co., LTD*, 257 F.3d 1364, 1372 (Fed. Cir 2001), which stated that, “[w]e have previously cautioned against the use of non-scientific dictionaries, ‘lest dictionary definitions be converted into technical terms of art

having legal, not linguistic significance.” (Citing *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1478, 45 USPQ2d 1429, 1433 (Fed. Cir. 1998).

Thus, in this application, Applicant has produced expert testimony and technical manuals discussing the difference between a “stud” and a “post.” That is, “posts” are the vertical members disposed at the corners of frames and “studs” are the vertical members disposed between the posts and which are spaced about 16 inches or 24 inches apart. As such, a general dictionary definition, such as a definition found in the Random House College Dictionary, has been “rendered irrelevant with respect to that term.”

Dattner, U.S. Patent No. 3,720,022 discloses a “building construction in which a basic unit of twelve elements is fabricated into a rectangular parallelepiped to define a structurally rigid module requiring no additional structural members.” That is, the module is defined by four lower horizontal members, four vertical members, and four upper horizontal members – and no additional structural members. It is noted that each of the four vertical members is located at a corner. That is, no vertical member in a module is disposed generally between two other vertical members. Thus, *Dattner* discloses a structure similar to the “cuboid volume” similar to the structure in U.S. Patent No. 6,959,515. As noted in the Delorenzo Affidavit, “[b]ecause the vertical members of the chassis are load-bearing members, the vertical members would be identified as “posts” by those skilled in the art. Further, because the patent does not disclose additional vertical supports, whether load-bearing or not, between the corner posts, this patent fails to disclose any “studs” as that word is understood in the art.” It is further noted that, as shown in Figure 2, the modules are “room sized” although no specific dimensions are stated. Therefore it can reasonably be assumed that the corners, and therefore the vertical members, in each module are more than 16 inches or 24 inches apart. As such, and in view of the definitions provided above, each of the vertical members disclosed in *Dattner* is a “post” and not a “stud.”

As stated in MPEP §2131:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.... The identical

invention must be shown in as complete detail as is contained in
the ... claim.

Verdigaal Brothers v. Union Oil Company of California, 814 F.2d 628, 631 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Company*, 868 F.2d 1226, 1236, (Fed. Cir. 1989). Given the definition of “multiframe openings” and the recitation of “studs” in Claim 1 and as used in this application, it is respectfully submitted that upon reading the *Dattner* reference, one skilled in the art would not consider a prefabricated house having “a module frame[] having one or more multiframe openings.”

Independent Claim 1 recites a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings. As the cited art does not disclose a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings, this reference cannot be used as a reference under 35 U.S.C. § 102(e) and the rejection of Claim 1 should be withdrawn.

Claim 2, 4, 17 and 18 each depend directly from Claim 1 and rely upon their dependency for patentability.

Claims 5-6; Rejected under 35 U.S.C. § 103(a)

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* ‘022 in view of *Derman* (U.S. Patent No. 2,070,924). The deficiencies of *Dattner* are noted above. *Derman* discloses a wardrobe or cabinet. There are at least three problems with the use of *Derman* as prior art: (1) *Derman* is non-analogous art; (2) the rejection is not properly supported; and (3) the *Derman* reference fails to disclose the elements cited by the Examiner.

With regard to the first point, Applicant refers to MPEP §2141.01 which cites *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In *Oetiker*, the applicant claimed an improvement in a hose clamp which differed from the prior art in the presence of a preassembly "hook" which maintained the preassembly condition of the clamp and disengaged automatically when the clamp was tightened. The Board relied upon a

reference which disclosed a hook and eye fastener for use in garments, reasoning that all hooking problems are analogous. The court held the reference was not within the field of applicant's endeavor, and was not reasonably pertinent to the particular problem with which the inventor was concerned because it had not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments.

This application relates to prefabricated houses. *Derman* discloses a wardrobe or cabinet. Just as a garment hook is not related to a hose clamp, a wardrobe is not related to a prefabricated house. That is, the Examiner has not demonstrated why one skilled in the art of building prefabricated houses would turn to a reference disclosing a wardrobe to create an improved modular home. As such, the *Derman* reference is non-analogous art.

With regard to the second point, in *KSR International Co. v. Teleflex Inc.*, ___ U.S. ___, ___, 2007 WL 1237837 (2007), the Supreme Court stated the following with respect to the determination of obviousness under 35 U.S.C. § 103:

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, *it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does*. This is so because inventions in most, if not all, instances rely on building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

Id., at 14 (emphasis added).

In addition, the Supreme Court further noted that:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, *all in order to determine whether there was an apparent reason to combine the known elements in*

the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (Fed Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness”).

Id., at ____ (emphasis added).

It is further noted that, *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) held that, although some of the cited references, individually, may have some of the claimed inventions' features, “one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *Id.* at 1075. Instead, to reach the proper conclusion under §103:

the decision maker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decision maker must then determine whether...the claimed invention as a whole would have been obvious at *that* time to *that* person.

Id. at 1073-74.

Applicant believes that the Examiner has not properly supported the rejection under 35 U.S.C. § 103(a) and under *KSR International*. The rationale for combining these references is set forth in a single sentence reading, “[i]t would have been obvious to one of ordinary skill in the art to removably coupled the studs to the cross members to allow for a greater degree in variation of size of the room modules as shown by Derman.” Office Action at 3. First, a single sentence is not an “articulated reasoning with some rational underpinnings” sufficient to establish a *prima facie* case of obviousness. Moreover, the Examiner has merely identified two specific components, a “stud” and cross members, from separate references and stated that these elements could be combined. The Examiner has not presented an “articulated reasoning with some rational underpinnings” addressing why one skilled in the art would, for example, need to add cross members to *Dattner* when *Dattner* specifically states that no members, other than those disclosed, are required. As such, the Examiner appears to be erroneously using

hindsight to pick and choose, among isolated disclosures in the prior art, the elements of the invention as recited in the claims of the present application.

With regard to the third point, the Examiner states that *Derman* discloses “cuboid volume ... with studs.” May 24, 2007, Office Action at 3. *Derman* discloses a wardrobe or cabinet. As set forth above, to those skilled in the art a “stud” is a wall frame element typically spaced about 16 inches or 24 inches apart and below a covering. *Derman* does not disclose any type of wall frame elements including “studs.”

Accordingly, as the cited references cannot be combined as suggested by the Examiner, and the individual references fail to disclose the elements recited in Claims 5 and 6, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Claims 7-11, 13, 16 and 19; Rejected under 35 U.S.C. § 103(a)

Claims 7-11, 13, 16 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* in view of *Prigmore et al*, U.S. Patent No. 4,779,514. The deficiencies of *Dattner* are noted above. *Prigmore* discloses a building constructed of pre-made panels that are coupled together by hinges. There are at least two problems with the use of *Dattner* ‘022 in view of *Prigmore* as combined prior art: (1) the rejection is not properly supported; and (2) the *Prigmore* reference fails to disclose the elements cited by the Examiner.

Each side panel of the *Prigmore* reference is disclosed as being pivotally coupled to the roof structure by a hinge element and coupled to a floor element by a plurality of latches. Such a configuration allows the structure to be moved in a collapsed form. This configuration, however, is decidedly the opposite of the frame assembly disclosed in *Dattner*. That is, the *Dattner* module relies upon the strength and rigidity of the elements to give each module the desired shape. Thus, the frame elements must be joined and the corners must “form a rigid corner joint.” See e.g., Col. 2, lines 47-61. Alternately, if the frame members are made from steel, the joints could be welded. See, Col. 3, lines 16-21. It is axiomatic that a hinged joint cannot be a rigid joint as the purpose of the hinge is to allow the joint to collapse. It is also axiomatic that a rigid joint, such as a joint formed by

welding, cannot be pivoted to allow for a sidewall to fold up against the roof unit. Accordingly, it is impossible to combine these references as suggested by the Examiner.

Moreover, the Examiner again fails to provide an “articulated reasoning with some rational underpinnings” sufficient to establish a *prima facie* case of obviousness. That is, the Examiner merely provides a one sentence conclusion asserting the reference can be combined, but does not articulate the reasons why or discuss how the combination of the references may be accomplished without destroying purpose of the individual references.

The Examiner further states that the *Prigmore* reference discloses both “passive space” and “fixed space.” Applicant disagrees. These phrases are defined phrases in the present application. *See generally*, page 8, lines 19-31. That is, the specification states:

Fixed space is rigid and does not include foldable panels 18. Fixed space is typically any space that has functionality beyond providing volume. For example, the following would qualify as fixed space: closets, bathrooms, kitchens, storages, laundry rooms or house mechanical space, as well as corridors and stairs. Conversely, passive space is compressible space, *i.e.*, that which may be folded. Typically, the passive space is not laden with fixtures, etc.

Id.

The “fixed space” of the *Prigmore* reference identified by the Examiner is an empty roof area. That is, the *Prigmore* reference does not disclose a “functionality beyond providing volume.” Thus, although not shown as being collapsible in the *Prigmore* reference, such a space is still a “space … which may be folded.” Any generally empty space, such as a hollow roof, could be folded, the mere fact that the *Prigmore* reference fails to disclose such a collapsible structure does not change that nature of the space. Additionally, the present application states that the “core modules” have both fixed and passive space. A “core module” is an “indoor room” (page 8, line 13) and not an “outdoor structure” (page 8, lines 17-18). A roof such as the *Prigmore* reference roof is not an “indoor room” and is an “outdoor structure.”

Claim 7, which depends from Claim 1, recites a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or

more multiframe openings and foldable panels. As these references cannot be combined and no individual reference discloses a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings and foldable panels, the rejection under 35 U.S.C. § 103(a) as to Claim 7 should be withdrawn.

Claim 8, which depends from Claim 7, further recites that a core module has both fixed and passive space. As these references cannot be combined and no individual reference discloses a core module having both fixed and passive space, the rejection under 35 U.S.C. § 103(a) as to Claim 8 should be withdrawn.

Claims 9 and 10 each depend from Claim 8 and rely on their dependency for patentability.

Claim 11, which depends from Claim 10, further recites that the multiframe openings are structured to be converted into openings. As these references cannot be combined and no individual reference discloses that the multiframe openings are structured to be converted into openings, the rejection under 35 U.S.C. § 103(a) as to Claim 11 should be withdrawn.

Claim 13 depends from Claim 12 and relies upon its dependency for patentability.

Claim 16 depends from Claim 10 and relies upon its dependency for patentability.

Claim 19, which depends from Claim 1, further recites that a core module has both fixed and passive space. As these references cannot be combined and no individual reference discloses a core module having both fixed and passive space, the rejection under 35 U.S.C. § 103(a) as to Claim 19 should be withdrawn.

Claims 14-15; Rejected under 35 U.S.C. § 103(a)

Claims 14-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dattner* ‘022 in view *Prigmore et al.* ‘514 as applied to claims 13 and 12 and further in view of *Derman* U.S. Patent No. 2,070,924. The limitations of each reference is detailed above. Further, the Examiner has again failed to provide an “articulated reasoning with

some rational underpinnings” sufficient to establish a *prima facie* case of obviousness. Accordingly, the rejection of Claims 14 and 15 is improper and should be withdrawn.

CONCLUSION

In view of the remarks above, Applicant respectfully submits that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,



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Exhibit A